

ENVIRONMENTAL ASSESSMENT

FOR IMPLEMENTATION OF THE

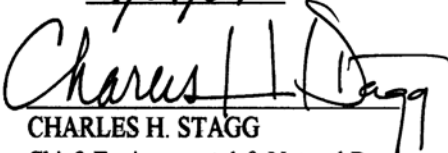
INTEGRATED CULTURAL RESOURCES MANAGEMENT PLAN, 2004-2008 JOINT READINESS TRAINING CENTER & FORT POLK, LOUISIANA

Reviewed by:


JAMES D. GRAFTON

Cultural Resources Manager
Environmental & Natural Resources
Management Division
Directorate of Public Works
Joint Readiness Training Center & Fort Polk
Fort Polk, Louisiana

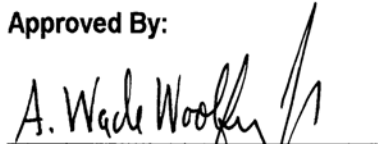
Date: 07/14/04


CHARLES H. STAGG

Chief, Environmental & Natural Resources
Management Division
Directorate of Public Works
Joint Readiness Training Center & Fort Polk
Fort Polk, Louisiana

Date: 14 July 04

Approved By:


A. WADE WOOLFREY, JR.

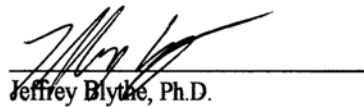
Colonel, Military Intelligence
Garrison Commander
Joint Readiness Training Center & Fort Polk
Fort Polk, Louisiana

Date: 3 AUG 04

Prepared For:

Joint Readiness Training Center & Fort Polk
Fort Polk, Louisiana

Prepared By:


Jeffrey Blythe, Ph.D.

Cultural Resources Planner
Gene Stout & Associates
4307 Crane Court
Loveland, Colorado

Date: 07/08/04

ENVIRONMENTAL ASSESSMENT ORGANIZATION

This Environmental Assessment (EA) evaluates the environmental effects of the JRTC and Fort Polk proposed action to implement the *Integrated Cultural Resources Management Plan, 2004-2008* (ICRMP) for Fort Polk, Louisiana.

An *Acronyms and Abbreviations* list is provided immediately following the *Table of Contents*.

An *Executive Summary* briefly describes the proposed action and environmental conditions and consequences.

- | | |
|--------------------|--|
| <i>Section 1.0</i> | <i>Purpose and Need for Action</i> summarizes the purpose of and need for the proposed action and describes the scope of the environmental impact analysis process. |
| <i>Section 2.0</i> | <i>Description of the Proposed Action and Alternatives</i> describes the proposed action to implement the ICRMP and alternatives considered to the proposed action. |
| <i>Section 3.0</i> | <i>Affected Environment and Environmental Consequences</i> describes environmental conditions at Fort Polk that may be affected by implementing the ICRMP. The section identifies potential environmental effects of the proposed action and its alternatives, compares and contrasts alternative effects, and identifies mitigation measures. |
| <i>Section 4.0</i> | <i>Summary of Effects and Conclusions</i> summarizes the significance of individual and cumulative effects with regard to each alternative and makes a recommendation to prepare either a Finding of No Significant Impact or a Notice of Intent for an Environmental Impact Statement. |
| <i>Section 5.0</i> | <i>Interdisciplinary Team</i> identifies the JRTC and Fort Polk team involved in scoping and preparation of the EA. |
| <i>Section 6.0</i> | <i>List of Agencies and Persons Contacted</i> provides a listing of agencies and persons consulted during the preparation of the EA. |
| <i>Section 7.0</i> | <i>List of Preparers</i> provides a list of those involved in the preparation of the EA. |
| <i>Section 8.0</i> | <i>References</i> provides bibliographical information for cited sources. |
| <i>Section 9.0</i> | <i>Public Comments</i> provides comments made by members of the public regarding the EA. |

ENVIRONMENTAL ASSESSMENT

FOR IMPLEMENTATION OF THE

INTEGRATED CULTURAL RESOURCES MANAGEMENT PLAN, 2004-2008 JOINT READINESS TRAINING CENTER AND FORT POLK, LOUISIANA

Table of Contents

EXECUTIVE SUMMARY	1
1.0 PURPOSE OF AND NEED FOR ACTION	2
1.1 Introduction	2
1.2 Purpose and Need for Action	2
1.3 Location.....	2
1.4 Scope of Environmental Analysis	3
1.4.1 Scoping and Issues Analysis	3
1.4.2 Issues Not Analyzed or Considered to be Potentially Significant	4
1.4.3 Other Relevant NEPA Documents	5
1.5 Decisions to be Made	5
2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES	6
2.1 Description of Proposed Action – Implementation of the ICRMP.....	6
2.2 Description of Alternatives to the Proposed Action	7
2.2.1 Alternatives Considered But Eliminated From Analysis.....	8
2.2.2 No Action Alternative	8
3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES	9
3.1 Land Use	9
3.1.1 Existing Conditions	9
3.1.2 Environmental Consequences	13
3.1.3 Cumulative Effects	14
3.2 Facilities (Real Property).....	14
3.2.1 Existing Conditions	14
3.2.2 Environmental Consequences	16
3.2.3 Cumulative Effects	16
3.3 Soils.....	16
3.3.1 Existing Conditions	16
3.3.2 Environmental Consequences	17
3.3.3 Cumulative Effects	18
3.4 Ground and Surface Water Resources.....	18
3.4.1 Existing Conditions	18
3.4.2 Environmental Consequences	20
3.4.3 Cumulative Impacts.....	20
3.5 Biological Resources	20
3.5.1 Existing Conditions	20
3.5.2 Environmental Consequences	22
3.5.3 Cumulative Effects	22
3.6 Cultural Resources	23
3.6.1 Existing Conditions	23
3.6.2 Environmental Consequences	24
3.6.3 Cumulative Effects	25
3.7 Environmental Justice	25
3.7.1 Existing Conditions	25
3.7.2 Environmental Consequences	26

3.7.3 Cumulative Effects	26
4.0 SUMMARY OF EFFECTS AND CONCLUSIONS	27
5.0 INTERDISCIPLINARY TEAM	28
6.0 LIST OF AGENCIES AND PERSONS CONTACTED	29
7.0 LIST OF PREPARERS	30
8.0 REFERENCES	31
9.0 PUBLIC COMMENTS	33

TABLES

Table 1: Thresholds of Concern	9
Table 2: Dominant and Noteworthy Soil Series	17
Table 3: Summary of Environmental Effects	27

FIGURES

Figure 1: Fort Polk and Vicinity.....	2
Figure 2: Training Areas, Fort Polk	11
Figure 3: Training Areas, Peason Ridge.....	12
Figure 4: Drainage, Fort Polk.....	18
Figure 5: Drainage, Peason Ridge	19
Figure 6: Vegetation, Fort Polk	20
Figure 7: Vegetation, Peason Ridge	21

Acronyms and Abbreviations

Advisory Council - Advisory Council on Historic Preservation
AR - Army Regulation
ASP - Ammunition Supply Point
CEQ - Council on Environmental Quality
CFR - Code of Federal Regulations
EA - environmental assessment
EIS - environmental impact statement
ENRMD - Environmental and Natural Resources Management Division
EO - Executive Order
EPR - Environmental Program Requirements
FONSI - Finding of No Significant Impact
FY - fiscal year
GIS - geographic information system
ICRMP - Integrated Cultural Resources Management Plan
INRMP - Integrated Natural Resources Management Plan
ITAM - Integrated Training Area Management
JRTC - Joint Readiness Training Center
MCA - Military Construction-Army
NAGPRA - Native American Graves Protection and Repatriation Act
NEPA - National Environmental Policy Act
NHPA - National Historic Preservation Act
NRHP - National Register of Historic Places
SHPO - State Historic Preservation Office
SOP - standard operating procedures

EXECUTIVE SUMMARY

Introduction

This environmental assessment (EA) evaluates the environmental effects of the JRTC and Fort Polk proposed action to implement the *Integrated Cultural Resources Management Plan, 2004-2008* (ICRMP) for Fort Polk and the U.S. Forest Service Limited Use Area. The ICRMP is the implementing document for the cultural resources management program of the Joint Readiness Training Center (JRTC) and Fort Polk during 2004-2008. Army Regulation (AR) 200-4, *Cultural Resources Management*, requires all installations with cultural resources to prepare and implement an ICRMP. This EA has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) and 32 CFR Part 651, *Environmental Analysis of Army Actions; Final Rule*.

Proposed Action

The proposed action is to implement the ICRMP during 2004-2008 to provide an integrated and comprehensive program for managing cultural resources on lands managed by JRTC and Fort Polk. The ICRMP defines roles and responsibilities for cultural resources management at all levels within JRTC and Fort Polk and provides a rational, tiered, and uniform basis for addressing all applicable legal requirements, consistent with the achievement of the needs, goals, and objectives of the military mission.

Alternatives

The No Action alternative is the only alternative to the proposed action considered in this EA and serves as a benchmark for evaluating the proposed action. For this analysis, the No Action alternative is to manage cultural resources per status quo, using existing procedures, as required, in compliance with the National Historic Preservation Act (NHPA), as amended, implementing procedures 36 CFR 800, and other laws, regulations, and executive guidance.

Environmental Consequences

This EA analyzes direct and indirect environmental effects. The potential for cumulative effects is also addressed.

As a result of examination for applicability to the proposed action, implementation of the ICRMP has been determined not to affect certain resource areas that frequently receive attention in NEPA analyses. Resources areas that were considered but excluded from further detailed analysis in this EA include climate, air quality, noise, geology (except soils), infrastructure (except facilities), socio-economic conditions, effects on children, and hazardous waste management.

Evaluation indicates that implementation of the ICRMP would result in beneficial effects in all instances for facilities and cultural resources. Continuation of existing management procedures, *i.e.* the No Action alternative, has the potential to result in slightly negative effects to facilities and cumulative adverse effects to land use, cultural resources, and environmental justice.

Mitigation

No mitigation measures would be required as a result of implementing the ICRMP. Individual projects undertaken at a later date in compliance with the procedures outlined in the ICRMP could result in actions that require mitigation measures. Appropriate mitigation measures would be identified and implemented at that time, as warranted.

Conclusions

In consideration of the integrated, long-term planning approach of the ICRMP, it is anticipated that significant environmental impacts would not occur. The prescribed management and compliance actions presented in the ICRMP stress the complete integration of all categories of cultural resources management with ongoing JRTC and Fort Polk plans and operations. Accordingly, a finding of no significant impact (FNSI) is appropriate under NEPA and its implementing regulations (40 CFR 1500-1508).

1.0 PURPOSE OF AND NEED FOR ACTION

1.1 Introduction

JRTC and Fort Polk is proposing to implement the ICRMP at Fort Polk and the U.S. Forest Service Intensive and Limited Use Areas. Development and implementation of an ICRMP is required by AR 200-4, *Cultural Resources Management*.

The purpose of this EA is to identify and evaluate environmental consequences of implementing the ICRMP, in accordance with NEPA, the Council on Environmental Quality Regulations, and 32 CFR Part 651, *Environmental Analysis of Army Actions; Final Rule*. The Army uses 32 CFR Part 651 to establish policy, procedures, and responsibilities for assessing environmental effects of Army actions. Army Pamphlet 200-4, *Cultural Resources Management*, specifically states that development of an ICRMP requires preparation of an EA.

This section presents the purpose and need for the proposed action, defines the scope of the environmental analysis and issues to be considered, identifies decisions to be made, and identifies other relevant documents and actions.

1.2 Purpose and Need for Action

The purpose of the proposed action is the integration of legal requirements for the management and conservation of cultural resources with the JRTC and Fort Polk military mission. The ICRMP identifies the scope and procedures to integrate cultural resources compliance requirements into day-to-day operations of JRTC and Fort Polk.

1.3 Location

Fort Polk is located in west central Louisiana near the communities of Leesville and DeRidder. Other adjacent, smaller communities are New Llano, Rosepine, Pitkin, Slagle, and Leander. The installation consists of two separate land areas, Main Post and Peason Ridge.

Main Post is located in Vernon Parish and contains about 105,708 acres¹. Of this total, 39,776 acres are administratively controlled by the U.S. Forest Service and designated an Intensive Use Area. The Intensive Use Area is available for use by the Army through the U.S. Forest Service Special Use Permit executed in 1992 and revised in 2002.

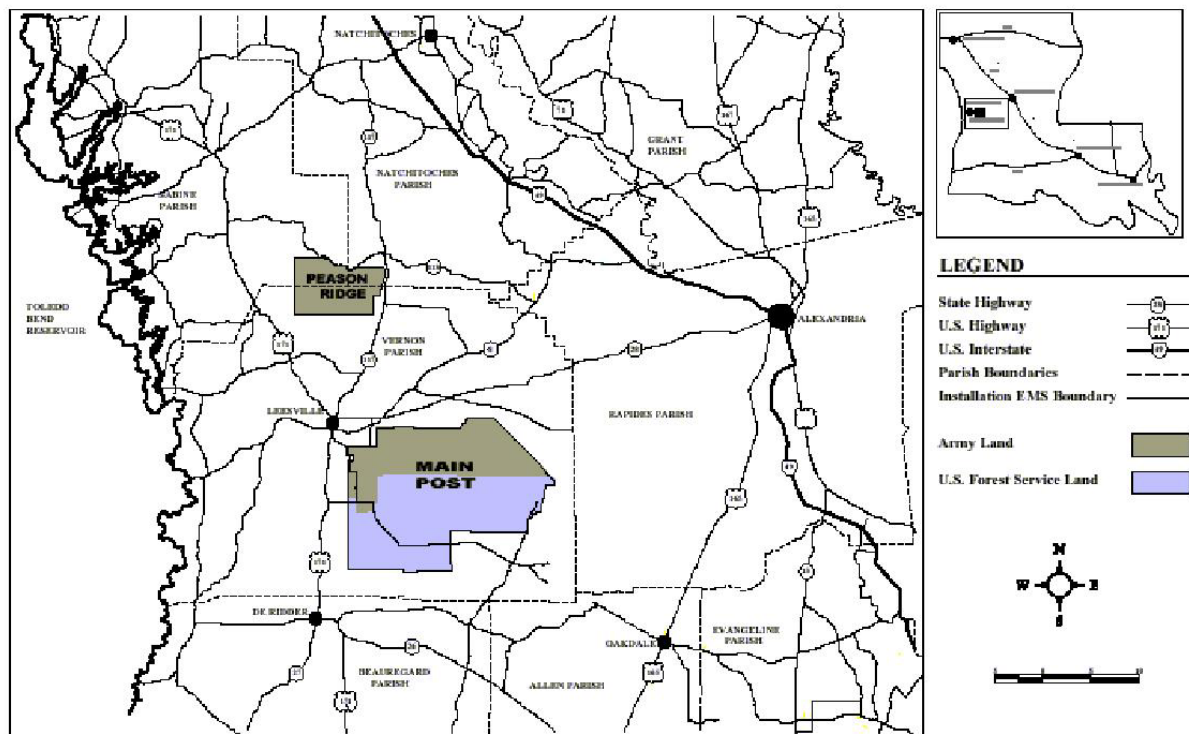
Peason Ridge Training Area (Peason Ridge), located about 15 miles northwest of Main Post, contains about 33,457² acres of which 480 acres are administratively controlled by the U.S. Forest Service and designated an Intensive Use Area. U.S. Forest Service portions of Peason Ridge are used by the Army under the conditions of the U.S. Forest Service Special Use Permit.

A 44,799-acre parcel within the Kisatchie National Forest in Vernon Parish that borders Main Post on the south has been designated a Limited Use Area. The 2002 revision to the U.S. Forest Service Special Use Permit increased the cultural resources management responsibility of JRTC and Fort Polk within this area. While the U.S. Forest Service retains administrative oversight of cultural resources management, JRTC and Fort Polk is responsible for conducting cultural resources investigations when Army actions may affect cultural resources. Therefore, cultural resources management of the U.S. Forest Service Limited Use Area is directly addressed in this ICRMP.

Figure 1: Fort Polk and Vicinity

¹ This figure is the acreage used for cultural resources management purposes generated by the Environmental and Natural Resources Management Division (ENRMD) geographic information system (GIS) and is slightly lower than the Real Property acreage of 105,753 acres.

² This figure is slightly higher than the Real Property acreage of 33,430 acres.



A 12,820-acre parcel within the Kisatchie National Forest in Natchitoches Parish has been designated a Special Limited Use Area. This area, also known as Horse's Head, is not contiguous with Fort Polk and occurs north of Peason Ridge. It is used by the Army under the conditions of the U.S. Forest Service Special Use Permit. JRTC and Fort Polk does not have management responsibility for cultural resources within Horse's Head. However, procedures for coordination with U.S. Forest Service cultural resources managers with regard to JRTC and Fort Polk activities within Horse's Head are addressed in the ICRMP.

1.4 Scope of Environmental Analysis

This EA includes cultural resource management activities that are ongoing or planned, and it also describes processes for managing and mitigating impacts to cultural resources from other JRTC and Fort Polk mission activities. This document shall serve as a baseline (programmatic) in addressing current conditions and providing guidance on environmental impacts (potential and cumulative) for cultural resource activities. This Environmental Assessment is not intended to replace the need for compliance with NEPA for future cultural resource management activities. However, it is intended to serve as the baseline Programmatic NEPA document upon which to evaluate future actions in a streamlined fashion. There is the intent to use, whenever feasible, Records of Environmental Consideration that reference this Programmatic EA or applicable categorical exclusions to efficiently and effectively meet the requirements of NEPA as new specific actions, programs, and projects that may affect cultural resources are implemented.

This EA will consider, compare, and evaluate two alternatives. The first alternative is the No Action alternative, which would continue the status quo. The second alternative, which is the JRTC and Fort Polk preferred alternative, is to implement the ICRMP.

1.4.1 Scoping and Issues Analysis

NEPA defines scoping as *"an early and open process for determining the scope of issues to be addressed and for identifying significant issues related to the proposed action"* (40 CFR 1501.7). These issues are used to develop alternative actions, including mitigation measures, and to evaluate the environmental consequences of those actions. A JRTC and Fort Polk interdisciplinary team (primarily personnel identified in Section 5.0, *Interdisciplinary Team*), has discussed issues and concerns regarding these projects. Although not a part of the

early scoping process, the public and interested agencies were given the opportunity to review this EA and provide comments.

1.4.2 Issues Not Analyzed or Considered to be Potentially Significant

The above scoping resulted in the elimination of many potential issues from analysis. The proposed action and the No Action alternative were determined to have little or no potential to affect the following resources.

Climate

Neither the proposed action nor its alternative would have potential to affect climate.

Air Quality

Neither the proposed action nor its alternative would have potential to affect air quality.

Noise

Neither the proposed action nor its alternative would affect noise levels.

Geology (except soils)

Neither the proposed action nor its alternative would have any effects on geologic resources.

Infrastructure (except facilities)

Neither the Proposed Action nor its alternative would have any significant effects on Fort Polk public services or utilities (e.g., transportation system, communications system, water supply, stormwater drainage, sewage treatment, solid waste energy use). All public services and utilities would continue to be maintained and operated in accordance with required permits and capabilities of the systems. Under both alternatives, the demand for utilities and roads would not be expected to change; therefore, neither alternative would affect public services or utilities.

Socio-economic Conditions

Neither the proposed action nor its alternative would increase or decrease human population in the area, affect demographic characteristics, or affect local or regional income or employment levels. Therefore, neither the proposed action nor its alternative would affect socio-economic conditions.

Effects on Children

EO No. 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, [62 Federal Regulation No. 78] was issued in April 1997. This EO directs each Federal agency to “ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health or safety risks.” Neither the proposed action nor its alternative would have significant or disproportionate adverse effects on children or pose health or safety risks.

Hazardous Waste

Neither the proposed action nor its alternative would result in the generation of hazardous waste.

Categorical Exclusion per 32 CFR Part 651

Some cultural resources management activities are excluded from NEPA review and are therefore not analyzed. 32 CFR Part 651, *Environmental Analysis of Army Actions; Final Rule* categorically excludes *studies, data collection, monitoring and information gathering that do not involve major surface disturbance*.

JRTC and Fort Polk cultural resources management activities covered under this categorical exclusion include:

- archeological and paleontological investigations as described in Sections 4.2.1.3, *Archeological Investigation Priorities, 2004-2008*, and 4.4.3.3, *Paleontological Resources*, of the ICRMP;
- archeological data recovery and mitigation, as addressed in Section 4.4.3, *Preservation/Mitigation Plans*, of the ICRMP; and
- historic architectural properties inventory, as described in Section 4.2.2.1, *Historic Architecture Investigation Priorities, 2004-2008*, of the ICRMP.

The categorical exclusion does not apply to other management activities for cultural resources, such as site protection measures.

1.4.3 Other Relevant NEPA Documents

Following is a list of recent NEPA documents that address the environmental impacts of implementing JRTC and Fort Polk environmental planning documents.

- *Environmental Assessment for Endangered Species Management, Fort Polk, Louisiana* (Draft) (Environmental and Natural Resources Management Division (ENRMD) and Gene Stout and Associates 2003a): This document addressed the environmental effects of implementing the *Endangered Species Management Plan for the Red-cockaded Woodpecker (Picoides borealis)* (ENRMD and Gene Stout and Associates 2003b).
- *Integrated Natural Resources Management Plan and Environmental Assessment, Joint Readiness Training Center and Fort Polk, Louisiana* (ENRMD and Gene Stout and Associates 2003c): This document, a combined EA and Integrated Natural Resources Management Plan (INRMP), identifies and evaluates environmental consequences of implementing the JRTC and Fort Polk INRMP for the planning period 2004-2008.

1.5 Decisions to be Made

The decision to be made is whether to implement the proposed action or select an alternative action. The Commander, JRTC and Fort Polk will make this decision.

2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

This section describes the proposed action (ICRMP implementation), alternatives considered to that action, and alternatives that were eliminated from detailed consideration.

2.1 Description of Proposed Action – Implementation of the ICRMP

JRTC and Fort Polk proposes to fully implement the ICRMP for Fort Polk and applicable U.S. Forest Service Limited Use Areas. The ICRMP was developed in accordance with AR 200-4 and Army Pamphlet 200-4.

This ICRMP is the implementing document for the JRTC and Fort Polk cultural resources management program during 2004-2008. It outlines procedures for consultation with the Louisiana State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation (Advisory Council), the U.S. Forest Service, Native American tribes, and other partners in cultural resources management. This ICRMP applies to cultural resources management on Fort Polk and on portions of the U.S. Forest Service Limited Use Area potentially affected by JRTC and Fort Polk mission activities.

Army requirements relating to development and approval of ICRMPs are outlined in AR 200-4, *Cultural Resources Management*. This ICRMP is an integral part of the JRTC and Fort Polk Master Plan. As a component of the Master Plan, the overall strategic goal of this ICRMP is to conserve and protect resources of significance to American history or prehistory or of cultural significance to Native Americans or other cultural groups.

The ICRMP establishes the following objectives toward accomplishment of this goal.

- Comply with federal and state laws and regulations governing the treatment of cultural resources while causing the least disturbance to the military mission.
- Review JRTC and Fort Polk actions in accordance with the National Historic Preservation Act of 1966, as amended (NHPA) and NEPA to ensure minimal impacts to significant cultural resources.
- Implement a *cultural landscape* planning approach to cultural resources management that recognizes the complexity of the human cultural interaction with the natural environment through time.
- Complete Phase II evaluation of archeological sites on Fort Polk and the U.S. Forest Service Limited Use Area for eligibility to the NRHP.
- Inventory and evaluate architectural properties constructed during the early years of the Cold War for eligibility to the NRHP.
- Protect and monitor NRHP-eligible archeological sites.
- Minimize adverse effects on cultural resources that meet criteria for inclusion in the NRHP.
- Curate cultural resources collections in accordance with federal and state regulations.
- Establish standard operating procedures and efficient management practices that streamline consultation and focus on significant cultural resources as opposed to those of little or no NRHP potential.
- Enforce federal laws that prohibit vandalism of cultural resources through law enforcement, monitoring, and public awareness.
- Consult with partners in cultural resources management, including the Louisiana SHPO, the Advisory Council, the U.S. Forest Service, and Native American tribes.
- Consider outside interests, including those of local governments and public groups.

The ICRMP identifies and describes laws, executive orders, regulations, policies, and agreements that affect the treatment of cultural resources under the stewardship of JRTC and Fort Polk. The ICRMP summarizes the physical setting and military mission of Fort Polk. It identifies JRTC and Fort Polk parties responsible for cultural resources management, including the Cultural Resources Manager.

The ICRMP summarizes the prehistoric and historic setting of Fort Polk. It provides a base-line inventory of cultural resources and identifies future requirements for inventory and evaluation of cultural resources. It identifies areas of concern with regard to management of cultural resources. It specifies protection measures for significant cultural resources and provides mitigation/preservation plans for significant cultural resources. The ICRMP establishes 10 standard operating procedures for cultural resources management and consultation. The

ICRMP provides Environmental Program Requirements (EPR) submissions and establishes a five-year budget for the JRTC and Fort Polk cultural resources management program.

All cultural resources management programs are integrated with no inconsistencies. To provide an overview of ICRMP scope, a list of ICRMP chapters and major sections is provided below

- 1.0 Executive Summary
- 2.0 Integrated Overview
 - 2.1 Goals
 - 2.2 Compliance Requirement
 - 2.3 Organizational Listing and Roles
 - 2.4 Location, Military Mission, and Land Use
 - 2.5 Environmental Conditions
- 3.0 Cultural Resources Inventory
 - 3.1 Archeological Resources
 - 3.2 Historic Architectural Properties
 - 3.3 Traditional Cultural Properties/Sacred Sites
 - 3.4 Curated Resources
- 4.0 Cultural Resources Management
 - 4.1 Consultation Partners
 - 4.2 Inventory and Evaluation
 - 4.3 Nomination to the NRHP
 - 4.4 Preservation and Mitigation
 - 4.5 Data Management
 - 4.6 Conservation Awareness
 - 4.7 Disclosure of Information
 - 4.8 Cultural Resources Contracting
 - 4.9 Integrated Cultural Resources Management Planning
- 5.0 Standard Operating Procedures
 - 5.1 SOP: Internal Coordination for Cultural Resources Review
 - 5.2 SOP: The Section 106 Process
 - 5.3 SOP: Inadvertent Discovery of Archeological Resources
 - 5.4 SOP: Inadvertent Discovery of Native American Remains and Associated Funerary Objects, Sacred Objects, or Objects of Cultural Patrimony (NAGPRA SOP #1)
 - 5.5 SOP: Intentional Archeological Excavation That May Result in Discovery of Native American Human Remains, Funerary Objects, Sacred Objects, and Objects of Cultural Patrimony (NAGPRA SOP #2)
 - 5.6 SOP: Treatment and Disposition of Native American Human Remains, Funerary Objects, Sacred Objects, and Objects of Cultural Patrimony Discovered Inadvertently or During Planned Archeological Excavations (NAGPRA SOP #3)
 - 5.7 SOP: Coordination with the U.S. Forest Service
 - 5.8 SOP: Cultural Resources Law Enforcement
 - 5.9 SOP: Economic Analysis of Historic Properties
 - 5.10 SOP: Emergency Operations
- 6.0 Implementation
 - 6.1 ICRMP Implementation Costs
 - 6.2 Staffing
 - 6.3 Personnel Training
 - 6.4 Command Support
- 7.0 References
- 8.0 Persons Contacted
- 9.0 Glossary
- 10.0 Technical Attachments

2.2 Description of Alternatives to the Proposed Action

2.2.1 Alternatives Considered But Eliminated From Analysis

No Management

The No Management alternative would be not to manage cultural resources on Fort Polk. This is not a viable alternative, as numerous laws, regulations, and executive orders (including Department of Army policy) require federal agencies to manage cultural resources under their stewardship. The No Management alternative will therefore not be analyzed.

Reactive Compliance

The Reactive Compliance alternative would be to comply with cultural resources laws and regulations strictly on a case-by-case basis rather than having a cultural resources management program as formulated in the ICRMP. Such an approach would inevitably lead to delays in JRTC and Fort Polk projects and activities to address cultural resources requirements, such as review and consultation. This alternative is rejected as impractical and infeasible.

2.2.2 No Action Alternative

Consideration of the No Action alternative is required by NEPA. The No Action Alternative represents status quo and serves as a benchmark against which the effect of the proposed action are compared. Under this alternative, JRTC and Fort Polk would continue to manage cultural resources under the 1999 Historic Preservation Plan (Anderson and Smith 1999). Compliance with laws and regulations would continue. The one major exception would be Army policy as established in Army Regulation 200-4 that requires the preparation and implementation of an ICRMP for all installations with significant cultural resources.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section discloses potential environmental effects of the proposed action and the no action alternative. Effects can be direct, indirect, or cumulative. Direct effects occur at the same place and time as the actions that cause them, while indirect effects may be geographically removed or delayed in time. Cumulative effects are combined effects of the proposed action plus those of other past, present and reasonably foreseeable future actions. This EA focuses on resources and issues of concern identified during the scoping process (see Section 1.4, *Scope of Environmental Analysis*) and on differences in effects among alternatives. Where effects were not identified as a concern or would not differ measurably among alternatives, those effects are discussed in lesser detail. For each area being analyzed examples of actions that would create significant impacts are provided (Table 1). These were established during NEPA analyses of other actions on Fort Polk during recent years by interdisciplinary teams (see Section 1.4.3, *Other Relevant NEPA Documents*).

Table 1: Thresholds of Concern*

Area of Concern	Spatial Boundary	Threshold of Concern Proposed Action could cause or result in:
Land Use	Installation boundary	If the proposed action could change the primary land use.
Facilities (Real Property)	Installation boundary	If the proposed action could alter or impede facilities management.
Soils	Installation watersheds	If the Proposed Action could cause erosion resulting in permanent loss of wetlands and/or soil loss.
Ground and Surface Waters	Watersheds and aquifers	If the proposed action could result in a violation of state water quality criteria for state scenic streams, violation of federal or state discharge permits, and/or potential degradation of an aquifer.
Biological Resources	Installation boundary	If the proposed action could result in the inability of the installation to achieve management objectives due to reduced habitat, the permanent loss or degradation of designated rare/sensitive plant sites, or the direct mortality or other unpermitted “take” of threatened or endangered species.
Cultural Resources	Installation boundary	If the proposed action could cause violations of federal, state, or installation regulations concerning significant sites or result in irretrievable or irreversible damage to a prehistoric or historic site that is listed or is eligible for listing on the National Register of Historic Places.
Environmental Justice	Region of Impact (Vernon and Beauregard Parish)	If the proposed action could significantly impact the environmental and human health of minority or low-income populations.

*Although some thresholds have been so designated based on legal or regulatory limits or requirements, others reflect discretionary judgment and best management practices on the part of the Army in accomplishing its primary mission of military readiness, while also fulfilling its conservation stewardship responsibilities. Quantitative/qualitative analyses may be used, if appropriate, in determining whether, and the extent to which, a threshold is exceeded.

3.1 Land Use

3.1.1 Existing Conditions

Military Mission Activities

The mission of JRTC and Fort Polk is to provide advanced level joint training for Army, Air Force, Army National Guard, Navy, and Marine Corps units under conditions that simulate low- and mid-intensity conflicts. JRTC provides rotation units the opportunity to conduct joint operations that emphasize contingency force missions. A JRTC training scenario is based on the Mission Essential Task List of each participating unit and is tailored to training objectives identified by its commander.

There are 10 JRTC training rotations each year at Fort Polk. Rotations normally last about three weeks. Each rotation consists of an Army light infantry brigade consisting of two battalions operating in the field and one

battalion operating in a computer-driven Command Post Exercise. Each rotation requires an average population of approximately 4,000 soldiers and an average land area of 45,200 acres for maneuvers. Training is associated with assembly areas, helicopter landing zones, and along infiltration routes for dismounted soldiers between Fort Polk and Peason Ridge (U.S. Army Corps of Engineers 1992). In addition to the JRTC, other units stationed at Fort Polk include the 2nd ACR and Warrior Brigade. These units use Fort Polk ranges to train and maintain their readiness.

Specific training activities that may affect or be affected by cultural resources management include the following.

- **Maneuver:** Maneuver is a common feature of military training operations. Maneuver can be mounted (vehicle-oriented) and/or dismounted (foot movement). Dismounted maneuver could be a platoon of soldiers assaulting an enemy position on foot or a squad on foot patrol. Mounted maneuver could be an assault with armored vehicles and supporting troops and equipment on an enemy position, which would generally be off-road. The other end of the spectrum of mounted maneuver would be the convoy movement of military vehicles on a road or trail.
- **Combat Engineer Operations:** Combat engineers provide support to combat units. Combat heavy engineers have two general classifications. Vertical units construct walls, drill wells, install power/communication lines, do general electric and plumbing tasks, build structures, and similar tasks. Horizontal units construct and maintain roads, prepare landing strips, dig fighting positions, construct or erect bridges, haul materials, and similar tasks.
- **Firing Ranges:** Live-fire training is conducted at firing ranges specifically designed for each weapon or weapon system. Firing ranges can be as simple as a firing line for shooters with permanent targets at known distances downrange to very sophisticated, computer-operated, multipurpose ranges with lanes for personnel or vehicles to move downrange engaging a variety of pop-up and/or moving targets. Ranges can be for weapons as basic as rifles and pistols or as complex as helicopter gunnery or artillery ranges. Existing ranges have a long history of use by the Army and, in consultation with the Louisiana SHPO, have been categorically excluded from cultural resources management requirements.
- **Bivouac:** Bivouac (temporary encampments) generally involves parking vehicles (from HUMVEEs to large wheeled and tracked vehicles), setting up tents, camouflage activities, preparing food, personal hygiene, and similar tasks (the military equivalent of camping). It is significant in that bivouac involves the concentration of vehicles and personnel at specific sites, often for extended periods. Bivouac sites are determined by the type of training, the area being used, and terrain features. Specific bivouac sites tend to be often used due to repeated similar training activities in commonly used areas with limited sites that meet bivouac requirements. Bivouac has potential to disturb archeological sites, especially where digging occurs and vehicles are concentrated.

Military Land Use Areas

Fort Polk has nine major or fully active maneuver and training areas; eight on the Main Post (including the U.S. Forest Service Intensive Use Area) (Figure 2) and one on Peason Ridge (Figure 3). Maneuver and training areas are subdivided into a number of smaller areas of varying size and capacity. The total acreage of maneuver areas on the Main Post and Peason Ridge is 126,162, subtracting the cantonment areas, impact areas, and other land unavailable for maneuver.

Fort Polk also uses 12,820 acres of U.S. Forest Service land located 20 miles to the north of Fort Polk in the Horse's Head Area, Kisatchie National Forest and 46,672 acres of U.S. Forest Service land immediately south of the Intensive Use Area (U.S. Army Corps of Engineers 1995). These two areas are used on a limited use basis (*e.g.*, limited digging, limited pyrotechnics, limited off-road vehicle operation). U.S. Forest Service approval for use of the areas must be obtained.

Training Areas

The eight training areas on Fort Polk are usually used for non-firing training. Live-firing may be approved on a case-by-case basis for any location. Each of the eight training areas is described below (U.S. Army Corps of Engineers 1995).

- **Big Creek** has about 5,195 acres. It is in the south-central portion of the installation. Big Creek is used mostly by field artillery units for live firing, primarily in the southern portion of the area. Aviation units use the same areas for forward operating sites. Dismounted operations are possible throughout the maneuver area. This maneuver area is heavily wooded and is bisected from north to south by Birds Creek.
- **Castor** consists of 1,847 acres and is to the north of the south cantonment area and west of the north cantonment area. Castor maneuver area is used primarily for dismounted land navigation. Castor is heavily wooded and swampy.
- **Fullerton** comprises 15,359 acres and is in the extreme eastern portion of the installation. The area is bounded by Old Fullerton Road on the west, Artillery Road on the north, the installation boundary on the east, and Look Out Road on the south. The area is used for both mounted and dismounted maneuver training and live fire exercises. Relatively large-scale (battalion/squadron) operations are possible. The maneuver area is heavily wooded with low swampy areas in several locations. Multiple watercourses cross this area primarily from north to south. There are numerous large, flat, open areas interspersed throughout the maneuver area.
- Most of the **Mill Creek** area that is available for maneuvers is in the west-central portion of the installation and totals 6,595 acres. The area is heavily wooded and swampy except for scattered small clearings. Multiple watercourses, running primarily north to south, traverse the area.
- **Rosepine** has 2,234 acres and is used primarily for dismounted exercises, in particular land navigation. Rosepine is in the southwestern corner of the installation, due south of the south cantonment area. The area is heavily wooded and swampy except for some relatively open areas.
- **Sixmile Creek** maneuver area is subdivided into five sections totaling 17,485 acres. This area includes Redleg Impact Area, multiple firing points, and various ranges and other firing facilities. Thus, the middle section of Sixmile Creek area is seldom available for training. Redleg Impact Area includes 28 percent of the acreage within the Sixmile Creek maneuver area. The southern portion of Sixmile Creek is suitable for field artillery firing and is occasionally used for indirect firing. Sixmile Creek is heavily wooded and divided by multiple watercourses. There are several relatively flat, open areas usually associated with a live-firing point or other facilities on the edge of Redleg Impact Area.
- **Slagle** maneuver area is located along the northern edge of the installation and contains 13,719 acres. It is bounded by the installation boundary on the west, north, and east; Artillery Road runs along the southern edge of the maneuver area. This area is heavily wooded, though some relatively open areas are interspersed throughout. Multiple watercourses divide the maneuver area. Dismounted operations are possible throughout the entire maneuver area. Due to the nature of the terrain and vegetation, mounted operations are generally difficult to accomplish. A mounted land navigation course runs along the northern boundary of the maneuver area. The northern section of the maneuver area is also used by field artillery units for live firing due to the presence of several large, flat, open sites within this maneuver area.
- **Zion Hills** is in the southwestern portion of the installation and consists of 17,873 acres. Approximately 90% of the Zion Hills area is within Zion Hills Small Arms Impact Area. As such, it is used almost exclusively as an impact area for various surrounding ranges. Dismounted operations by JRTC can be conducted whenever surrounding ranges are not “hot.” The area is heavily wooded and swampy, except in the immediate vicinity of various ranges along edges of the area. Numerous small watercourses flow through the area, and sedimentation ponds are located along the western side of this impact area.

Ranges

Fort Polk has about 70 firing ranges. Ranges 2A through 24 are primarily used for training on small arms, tank subcaliber, individual antitank weapons, and grenade launchers that fire into Zion Hills Small Arms Impact Area. Ranges 30 through 45 are dedicated for large caliber, crew-served weapons and fire and maneuver courses. These ranges, as well as artillery firing points, generally fire into Redleg Impact Area (Figure 2).

Figure 2: Training Areas, Fort Polk

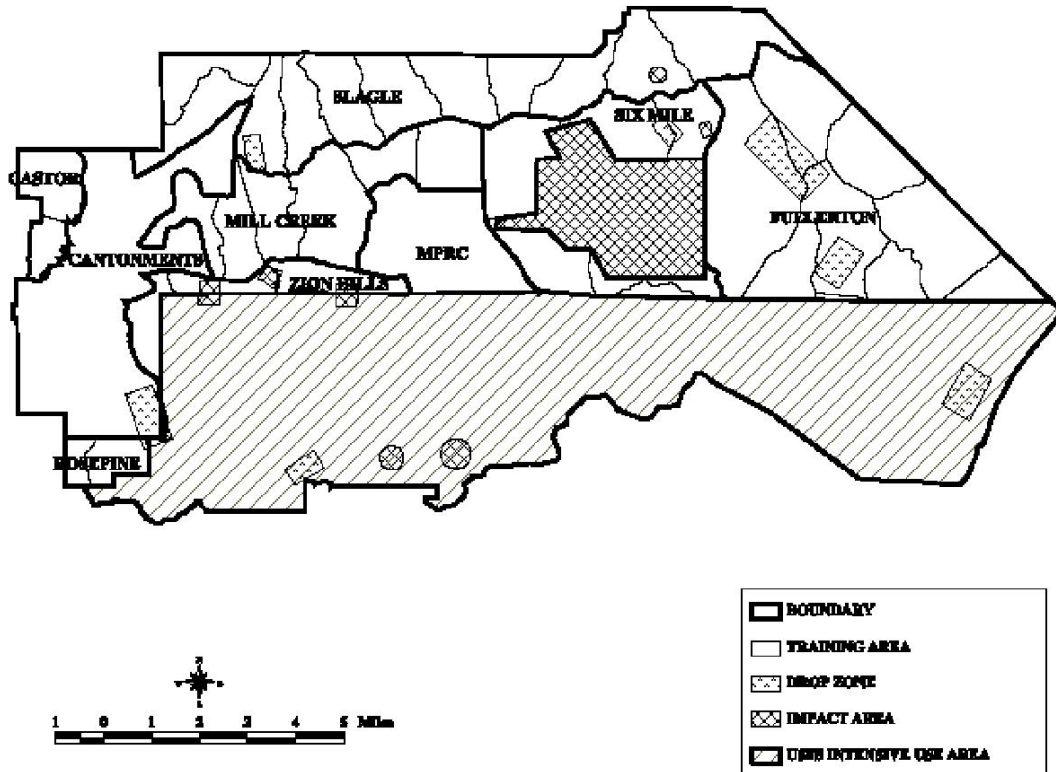
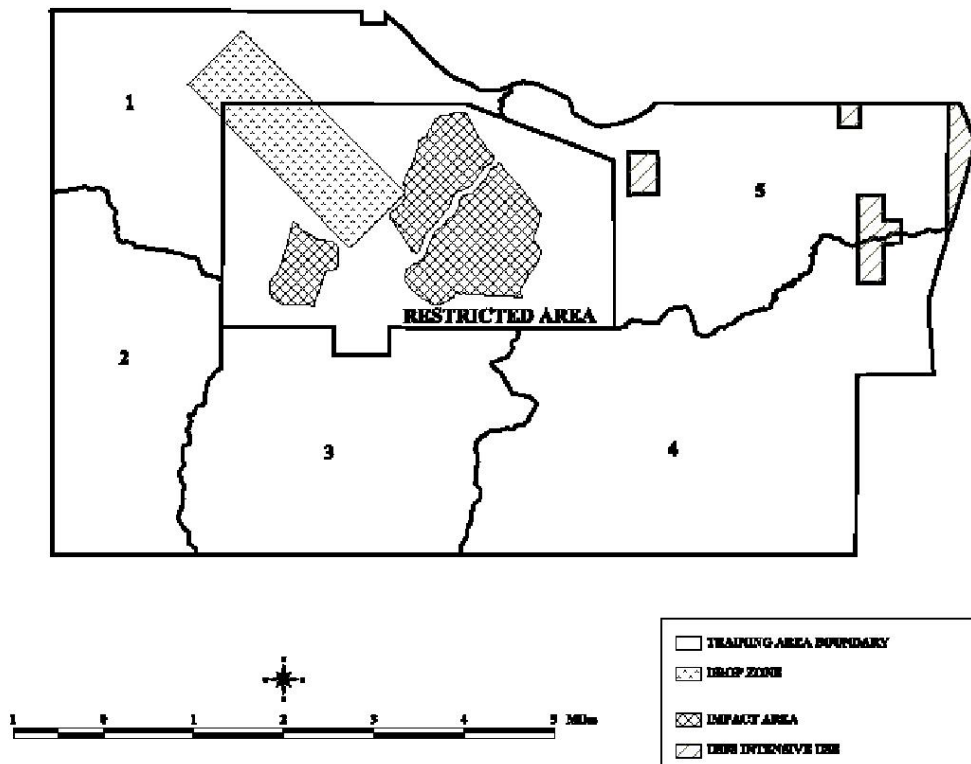


Figure 3: Training Areas, Peason Ridge



Impact Areas

Fort Polk Main Post has two impact areas: Zion Hills Small Arms Impact Area and Redleg Impact Area. Zion Hills Small Arms Impact Area is almost completely within the U.S. Forest Service Intensive Use Area. Land use in this area is conducted according to the Special Use Permit Authorization. Redleg Impact Area (4,840 acres), which is used for large caliber, crew-served weapons, and fire and maneuver courses, is off-limits to all natural resources management. These facilities are routinely used for a variety of tank/Bradley, heavy antitank, air defense, aerial, and combat engineer gunnery tables.

Peason Ridge's impact area (8,250 acres) is used for live fire ranges and some unit maneuver (Figure 3). Access is possible for natural resources management; however, digging and other ground disturbing operations are not advisable due to unexploded ordnance.

Redleg and Peason Ridge impact areas and impact areas of Ranges 16A, 21, and 45 are contaminated with unexploded ordnance. Peason Ridge's impact area has been surface cleared to permit both mounted and dismounted maneuver. However, some unexploded ordnance may still be present.

Other Land Use Areas

Forest Management Compartments

Forest land on both Main Post and Peason Ridge is divided into 60 forest management compartments. The installation manages 99,399 acres of forest, exclusive of the 4,840-acre Redleg Impact Area, which is closed to forest management. The JRTC and Fort Polk *Integrated Natural Resources Management Plan* contains a map and description of the forest compartments.

Watershed Areas

The Integrated Training Area Management (ITAM) program uses watersheds for planning its LRAM projects. There are 16 identified watersheds on Fort Polk's Main Post and eight on Peason Ridge. The JRTC and Fort Polk *Integrated Natural Resources Management Plan* contains a map of these watershed areas.

Outdoor Recreation Areas

The United States Army, State of Louisiana and the U.S. Fish and Wildlife Service jointly manage about 140,000 acres on Fort Polk and Peason Ridge as wildlife management areas. These areas are open to the public when not conflicting with the military mission. During JRTC training, 75 to 90 percent of these areas may be closed to the public. Also, areas containing unexploded ordnance or sensitive equipment are permanently closed for hunting and fishing.

Hunting is the principle natural resources-based outdoor recreation program at Fort Polk. The installation has over 10,000 man-days of hunting each year. Trapping is allowed on Fort Polk under special permit. There are approximately 2,000 user-days of fishing per year. Fishing activities on the installation focus primarily on streams, Alligator Lake, and the two Marion Bonner Lakes. The installation has nine ponds and lakes available for fishing (67 acres). Training (maneuver) areas are used to delineate hunting, fishing, and trapping activities on the installation (Figures 2 and 3).

3.1.2 Environmental Consequences

Proposed Action

The ICRMP established standard operating procedures (ICRMP Section 5.1, *SOP: Internal Coordination for Cultural Resources Review*) whereby land use activities that have potential to adversely affect cultural resources are reviewed by the Cultural Resources Manager. NRHP-eligible or potentially eligible archeological sites in areas that may be impacted by military training or other land use activities are protected with signage prohibiting digging and/or vehicular maneuver, as described in Section 4.4.3, *Preservation/Mitigation Plans*, of the ICRMP. These areas are not actually placed off-limits. Rather, specific activities that may disturb sites are prohibited. These passive protection measures would not adversely affected military training. Due to the fact that archeological survey is complete, protected areas would not likely increase during 2004-2008. Overall, the proposed action would have no significant impact on land use.

No Action Alternative

The No Action alternative would continue existing cultural resources management procedures with respect to land use. Review of land use action by the Cultural Resources Manager would continue (although not formalized in standard operating procedures). Ongoing passive protection measures for protection of archeological sites would not adversely affect military training. Due to the fact that archeological survey is complete, protected areas would not likely increase. Overall, the No Action alternative would have no significant impact on land use.

3.1.3 Cumulative Effects

The proposed action would result in no cumulative effects, beneficial or negative, to land use. Under the No Action alternative, the lack of formalized procedures for cultural resources review of land use actions could have slightly negative effects to land use in the long-term if there is turnover in personnel and current review processes are discontinued.

In considering the cumulative impacts of the proposed action and the No Action alternative, past, present, and other foreseeable future actions must be considered. Past actions have not significantly affected land use on the installation. Since its inception, Fort Polk has utilized its lands for training, housing, and administrative needs to support the military mission. Therefore, past actions have no effect to cumulatively add to the proposed action or the No Action alternative but rather have fully supported the intended land use. As with past actions, current actions fully support military training.

All but two proposed future actions fully support current land use. These two actions are fencing of the cantonment area and privatizing family housing. Both of these actions have been analyzed in separate EAs. The EA for the proposed fencing determined there were no impacts to land use. The EA for the proposal to privatize family housing determined that there were short-term, minor adverse effects to training land use and long-term, minor beneficial effects to housing area land use. Therefore, the only identifiable action to be cumulatively added to the proposed action or No Action alternative is privatization. When the short-term minor effects to land use from privatization are combined with the slightly negative effects from the No Action, they do not additively constitute a significant effect.

3.2 Facilities (Real Property)

3.2.1 Existing Conditions

Facilities

Fort Polk's real property inventory includes 2,887 standing structures with 14.58 million square feet of floor space. Facilities on Fort Polk's Main Post are concentrated primarily within two cantonment areas, South Fort, which has post headquarters, support facilities, and Fort Polk Army Airfield, and North Fort, which consists primarily of temporary wood-frame structures. Peason Ridge has a smaller cantonment area consisting of barracks, mess, supply, administrative, and storage buildings.

Capital Improvements (Military Construction-Army)

The Military Construction-Army (MCA) Program is responsible for long-range planning and development of facilities on Fort Polk. Following is a list of planned projects from the JRTC and Fort Polk MCA Program list sorted by fiscal year (FY). Project descriptions are taken from the *Environmental Assessment for Construction and Operation of the Digital Multi-Purpose Battle Area Course (DMPBAC)* (Tetra Tech, Inc. 2003a) and the *Draft Environmental Impact Statement for 2nd Armored Cavalry Regiment Transformation and Installation Mission Support, Joint Readiness Training Center (JRTC) and Fort Polk Louisiana and Long-Term Military Training Use of Kisatchie National Forest Lands* (Tetra Tech, Inc. 2003b).

FY 2004

- *Digital Multi-Purpose Battle Area Course (DMPBAC) (Peason Ridge)*: The DMPBAC will consist of a range complex including two qualification firing trails, 10 vehicle battle positions, 10 machine gun bunkers, and four support facilities in the eastern portion of Peason Ridge (Tetra Tech, Inc. 2003a). The support facilities are listed as projects for FY 2005.

- *Mission Support Training Facility (Main Post)*: This project involves construction of a 103,000 square-foot Mission Support Training Facility to support sophisticated, realistic battle simulation training. The project would involve demolition of existing buildings to make space for the new facility (Tetra Tech, Inc. 2003b).
- *Arms Storage Facilities (Main Post)*: This project will create weapons storage space in six new storage facilities totally 4,000 square feet. Two existing storage buildings totally 1,400 square feet will also be rehabilitated (Tetra Tech, Inc. 2003b).
- *Alert Holding Area (Main Post)*: This project will replace an obsolete scale facility that is 40 years old. The new facility will consist of a technical inspection building (21,200 square feet) and a maintenance building (4,400 square feet). The project will also include a fuel station, loading ramps, and staging areas (278,700 square feet). The proposed site is in an undeveloped area (Tetra Tech, Inc. 2003b).
- *Aviation Maintenance Hangar (Main Post)*: This project will provide adequate hangar space for climate-sensitive indoor maintenance of aircraft. A high-bay maintenance hangar (93,200 square feet), a petroleum, oils, and lubricants building (700 square feet), and an unmanned aerial vehicle shelter (12,000 square feet). Development will occur on 43 acres near the airfield (Tetra Tech, Inc. 2003b).

FY 2005

- *ASP Expansion (Main Post)*: This project will expand the current Ammunition Supply Point (ASP) by about 8.5 acres to support the Army Power Projection mission (Tetra Tech, Inc. 2003b).
- *Shoot House (DMPBAC Support Facility) (Peason Ridge)*: This range improvement project is to support the DMPBAC and will result in construction of a 2,700 square-foot Shoot House with a 1,500 square-foot supporting operations/storage building (Tetra Tech, Inc. 2003a).
- *Urban Assault Course (DMPBAC Support Facility) (Peason Ridge)*: This project will construct an urban assault course consisting of an open/storage building (2,400 square feet) and five training stations (Tetra Tech, Inc. 2003a).
- *Live Fire Villages (DMPBAC) (Peason Ridge)*: This project will construct two mock villages for use on the DMPBAC. Each village would consist of seven single-story building trainers, a two-story townhouse, three building facades, one courtyard, and one ventilated tunnel system (Tetra Tech, Inc. 2003).
- *Breach Facility (DMPBAC) (Peason Ridge)*: This project will construct three stations in the DMPBAC to train soldiers in breaching techniques against hardened structures. Each station will contain a wall, window, and door (Tetra Tech, Inc. 2003a).
- *Battalion Headquarters and Material Management Center (Main Post)*: This project will provide two standard-design battalion headquarters (11,511 square feet each) and a material management center (8,242 square feet) (Tetra Tech 2003b). The project will involve demolition of outmoded facilities.
- *Pallet Processing Facility (Main Post)*: This project will provide an installation-level pallet processing facility for Fort Polk. A standard-design pallet facility will be constructed to store and process pallet systems used in air transportation. The facility will include a four-bay storage building with office space, a vehicle loading area, and three pallet scales. Construction will occur in a developed area and will require demolition of some existing facilities (Tetra Tech, Inc. 2003b).
- *Digitize and Upgrade Existing Multi-Purpose Range Complex (Main Post)*: This project will modernize and expand the Multi-Purpose Range Complex on Main Post. The range will be expanded by some 884 acres. New facilities will include a central control/after-action review building (5,150 square feet), a general instruction building (1,600 square feet), 45 moving infantry targets, 233 stationary infantry targets, 15 moving armor targets, and 100 stationary armor targets. A permanent firebreak will be established around the complex (Tetra Tech, Inc. 2003b).

FY 2006

- *Unit Deployment Equipment Storage Facility (Main Post)*: This project will construct two new buildings (totaling 77,200 square feet) to increase storage capacity. The proposed site is on an undeveloped hillside (Tetra Tech, Inc. 2003b).

FY 2007

- *Company Headquarters Buildings (Main Post)*: This project will provide for renovation and/or new construction of administrative space for JRTC and Fort Polk companies. Construction of four new buildings will total 103,418 square feet. Approximately 123,335 square feet of existing administration space will be

renovated (Tetra Tech, Inc. 2003b).

Long Range (May occur in FY 2008 or later)

- *After Action Review Theater (Main Post):* This project will provide a 21,000 square-foot, four-plex theater to support up to five after-action reviews per day for united conducting rotations on Fort Polk. Proposed siting for the project is at an undeveloped site (Tetra Tech, Inc. 2003b).
- *JRTC Observer/Controller Operations Facilities (Main Post):* This project will construct eight administration buildings totaling 132,300 square feet, two support facilities totaling 30,000 square feet, and a Rotational Training Contractors Headquarters and Contracting Officer Representative Building of 4,900 square feet. Infrastructure improvements will include a road extension and new walks, curbs, gutters, and parking areas. A total of 32 buildings in the 7000 and 7100 blocks as well as buildings 1650, 1651, and 1652 will be demolished (Tetra Tech, Inc. 2003b).
- *JRTC Observer/Controller Vehicle Maintenance Facility (Main Post):* This project will create a large, battalion-level motor pool including an eight-bay maintenance shop (30,600 square feet), an equipment storage building (19,900 square feet), a petroleum, oils, and lubricants building (600 square foot), and a 50,000 square-yard hardened area. Construction will occur at a partially developed site (Tetra Tech, Inc. 2003b).
- *Forward Operating Base (Main Post):* The project will construct a Forward Operating Base containing 114,740 square feet of administration, communications, storage, billeting, and medical space. The project is proposed for a partially developed site (Tetra Tech, Inc. 2003b).

3.2.2 Environmental Consequences

Proposed Action

The ICRMP is an integral component of JRTC and Fort Polk Master Planning, and projects and management activities outlined in the ICRMP are consistent with facilities development and management on Fort Polk. The ICRMP (Section 4.2.2.1, *Historic Architecture Investigation Priorities, 2004-2008*) establishes a project to inventory Cold War-era facilities on Fort Polk for NRHP eligibility, per Sections 110 and 106 of the NHPA, as they reach 50 years of age. A total of 102 properties would be inventoried during 2004-2008. Completion of these inventories would forego the need for case-by-case investigation of such facilities in the event that they were affected by MCA projects listed above or by other mission activities. In the event that some facilities were determined to be eligible for inclusion in the NRHP, further review, per Section 106, would be required if such facilities were impacted by MCA projects or other mission activities. In any case, implementation of the ICRMP would greatly streamline the review process and benefit MCA projects and facilities management on Fort Polk. Overall, the proposed action would have a slightly beneficial effect on facilities management.

No Action Alternative

The No Action alternative would deal with cultural resources management requirements with regard to facilities on Fort Polk on a case-by-case basis rather than on a programmatic level. Investigation and evaluation of Cold War-era facilities on an individual basis as part of cultural resources review associated with proposed JRTC and Fort Polk projects could lead to delays in those projects. Overall, the No Action alternative would have a slightly negative effect on facilities management.

3.2.3 Cumulative Effects

There would be no foreseeable cumulative effects to facilities, either beneficial or negative, as a result of the proposed action or the No Action alternative. Additionally, since neither the proposed action nor the No Action alternative would produce measurable impacts on facilities, they cannot be added to other past, present, or foreseeable future actions to cause a significant effect. Furthermore, effects on real property would not impact other areas of concern in the human or natural environment.

3.3 Soils

3.3.1 Existing Conditions

Soils in southwest Louisiana are generally low in fertility and highly acidic. Twenty different soil series occur on Fort Polk (Main Post, U.S. Forest Service Intensive Use Area, and Peason Ridge). The extent and locations of the series on Fort Polk are mapped and available from the Fort Polk Geographic Information System database.

Dominant series on the Main Post (and impact area) are Ruston, Briley, and Susquehanna (Table 1). Dominant soils at Peason Ridge are Mayhew and a Kisatchie-Rayburn association. The Hollywood series is located on the Main Post and is associated with the Castor Creek Member of the Fleming Formation. Hollywood soils are of limited extent on the installation and occur in discrete patches. This series supports calcareous prairie (Castor Prairie), which is very rare in the state and is considered a very significant remnant vegetation for the installation (Hart and Lester 1993).

Table 2: Dominant and Noteworthy Soil Series

Series	Classification	Location
Ruston	Fine-loamy, siliceous, thermic Typic Paleudults	Main Post and impact area
Briley	Loamy, siliceous, thermic Arenic Paleudults	Main Post and impact area
Susquehanna	Fine, montmorillonitic, thermic Vertic Paleudalfs	Main post and impact area
Mayhew	Fine, montmorillonitic, thermic Vertic Albaqualfs	Peason Ridge
Kisatchie-Rayburn	Fine, montmorillonitic thermic, Typic Hapludalfs and Vertic Hapludalfs, respectively	Peason Ridge
Hollywood	fine, montmorillonitic, thermic Typic Pelludert	Main Post; very limited extent; supports calcareous prairie which is very rare in the state

Source: Hart and Lester (1993)

The NRCS classifies Fort Polk soils as highly erodible. Soils unprotected by vegetation are susceptible to water erosion from the moderate and intense storms. The most prevalent type of erosion is gully, but sheet and rill erosion may precede this (U.S. Army Corps of Engineers 1992).

3.3.2 Environmental Consequences

Proposed Action

Archeological and paleontological investigations as described in Sections 4.2.1.3, *Archeological Investigation Priorities, 2004-2008*, and 4.4.3.3, *Paleontological Resources*, of the ICRMP could affect soils if excavation is required. Such effects, however, would be very localized and insignificant to broader soil erosion processes. Investigations are covered under a categorical exclusion for NEPA review per AR 200-2 (see Section 1.4.2, *Issues Not Analyzed or Considered to be Potentially Significant*).

Protection of sensitive archeological sites with protective signage prohibiting digging and/or vehicular maneuver could have localized, beneficial effects on soil conservation. These effects, however, would be limited. Overall, implementation of the ICRMP would have no significant impact on soils.

No Action Alternative

Continuing archeological and paleontological investigations could affect soils; however, such effects would be very localized and isolated. In addition, such investigations are covered under a categorical exclusion for NEPA review, per AR 200-2 (see Section 1.4.2, *Issues Not Analyzed or Considered to be Potentially Significant*). Current procedures for protection of sensitive archeological sites could have localized, beneficial effects on soil conservation by prohibiting digging and/or vehicular maneuver. These effects, however, would be limited. Overall, the No Action alternative would have no significant impact on soils.

3.3.3 Cumulative Effects

Because archeological and paleontological investigations are a group of actions that, as a whole, do not cause soil erosion problems, they are categorically excluded from NEPA analysis. Since this group of activities has been determined to not cause effects, they cannot additively cause cumulative effects. Therefore, there would be no foreseeable cumulative effects to soils, either beneficial or negative, as a result of the proposed action or the No Action alternative.

3.4 Ground and Surface Water Resources

3.4.1 Existing Conditions

Groundwater

Freshwater aquifers in the Fort Polk area are in saturated sand and gravel beds found near the ground surface under water table conditions, or at considerable depth under artesian conditions. Recharge is by waterfall on outcrops and infiltration from adjacent saturated deposits. At least four water-bearing zones have been identified in the main cantonment area, the shallowest of which is at a depth of about 400 feet. At Peason Ridge, fresh water occurs in the saturated sand of the Miocene formation and is confined by impervious clay beds above and by sand below (U.S. Army Corps of Engineers 1992).

Groundwater supplies potable water for JRTC and Fort Polk via 12 active wells (ENRMD and Gene Stout and Associates 2003c). A U.S. Geological Survey Report (McWreath and Smoot 1989) summarizes hydrogeologic characteristics of aquifers used by the JRTC and Fort Polk for its water supply.

Surface Water

Most of the Main Post (Figure 4) is within the Calcasieu River watershed, except Bayou Zourie, which drains a portion of the northwestern corner of the installation to the Sabine Basin. Most streams originate near the northern border and flow to the south off of the installation.

Several of these streams are associated with the state scenic stream system. Ouiska-Chitto, West Fork Sixmile, and East Fork Sixmile creeks are designated as state scenic rivers beginning south of the Intensive Use Area. The Louisiana Scenic Rivers Act of 1988 and its implementing regulations regulate these scenic rivers.

Ouiska-Chitto Creek flows in a southeasterly direction until it reaches the confluence of the Calcasieu River. Big Branch, Mill Creek, Bee Branch, and numerous other tributaries form the drainage area of the watershed. Birds Creek flows in a southeasterly direction until it reaches the confluence of Ouiska-Chitto Creek below the watershed and above its confluence with the Calcasieu River. Tenmile Creek flows in a southeasterly to southern direction until it reaches the confluence of Ouiska-Chitto Creek below the watershed and above its confluence with the Calcasieu River. Brushy Creek flows in a southeasterly to southern direction until it reaches the confluence of Sixmile Creek (ENRMD and Gene Stout and Associates 2003c).

Figure 4: Drainage, Fort Polk

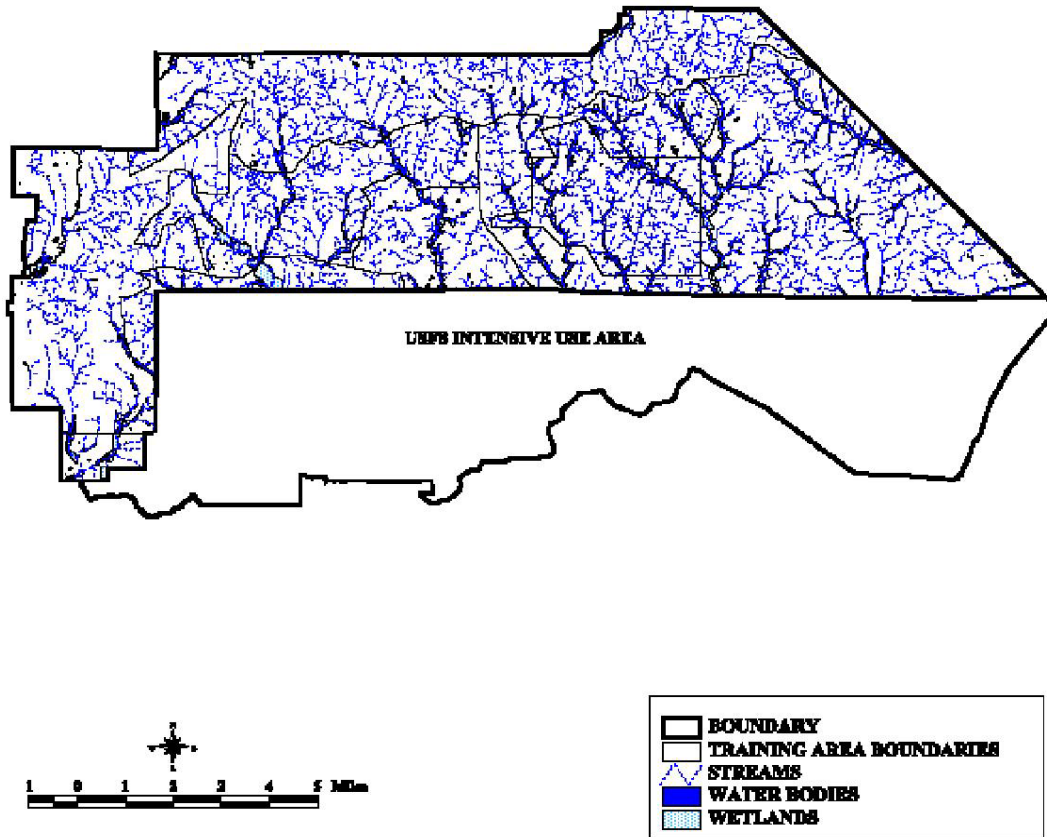
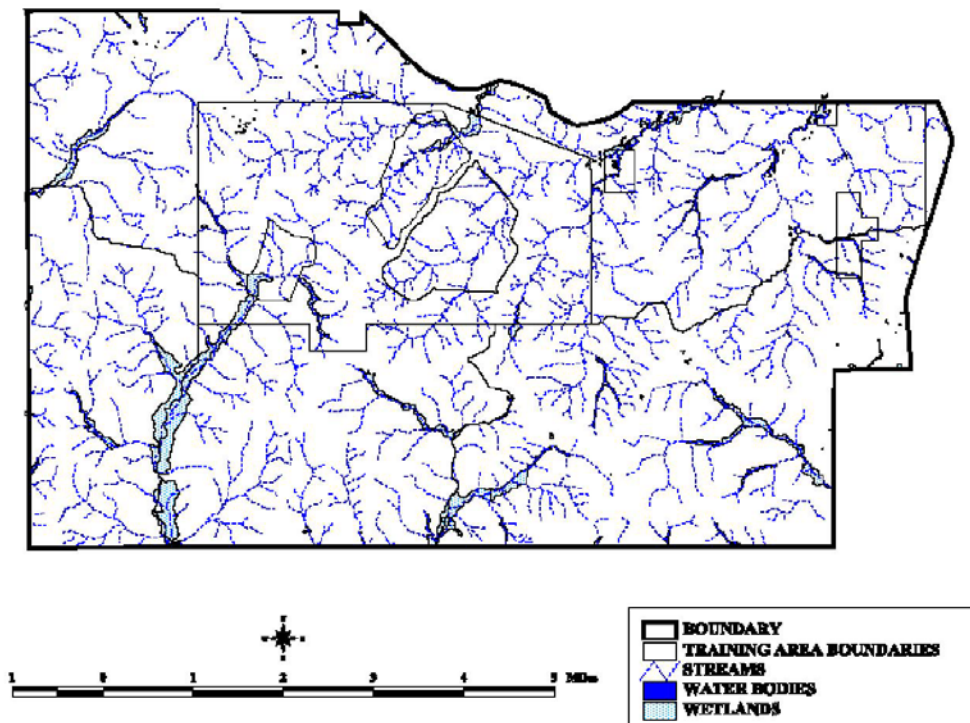


Figure 5: Drainage, Peason Ridge



Peason Ridge (Figure 5) is within the Sabine River, Red River, and Kisatchie Bayou systems with limited drainage in the eastern portion of the Comrade Creek-Calcasieu River system. Kisatchie Creek flows west, then east, and then north until it reaches Old River. Odom Creek, Tiger Creek, Sandy Creek, Long Branch, Reaugaulle Creek, Little Sandy Creek, Kisatchie Creek, Lyles Creek, Stagestand Creek, and numerous other tributaries form the drainage area of the watershed (ENRMD and Gene Stout and Associates 2003c).

There are several surface water impoundments within the Main Post and Peason Ridge. The two Marion Bonner Lakes, Engineer Lake, and Alligator Lake are managed fisheries lakes.

3.4.2 Environmental Consequences

Proposed Action

Some archeological sites occur in association with ground and surface water sources, and there is limited potential for impacts from planned cultural resources investigations and management activities. In the event that investigations occur near ground or surface water sources, the Cultural Resources Manager would consult with natural resources staff to avoid negative impacts.

The proposed action would have no significant impact on ground or surface water.

No Action Alternative

Some archeological sites occur in association with ground and surface water sources, and there is limited potential for impacts from ongoing cultural resources investigations and management activities. In the event that investigations occur near ground or surface water sources, the Cultural Resources Manager will consult with natural resources staff to avoid negative impacts.

The No Action alternative would have no significant impact on ground or surface water.

3.4.3 Cumulative Impacts

There would be no foreseeable cumulative effects to ground or surface water, either beneficial or negative, as a result of the proposed action or the No Action alternative. No effects would be produced by either the proposed action or the No Action alternative that could cumulatively be added to past, present, and foreseeable future actions.

3.5 Biological Resources

3.5.1 Existing Conditions

Flora

Vegetation of Fort Polk (Figure 6) and Peason Ridge (Figure 7) consists mostly of mixed communities of longleaf pine, red oak, and sassafras. Bottomland vegetation consists of oak, water oak, swamp chestnut, and sweetgum. Paleoenvironmental conditions can only broadly be inferred for the region based on general climatic data, which indicates a Late Pleistocene/Early Holocene transition from colder jack pine/spruce elements to cool and moist conditions associated with an increase in deciduous communities. During the middle Holocene, warmer and drier conditions prevailed, and grassland/prairie communities spread throughout uplands. Around 3500 BP wetter and cooler conditions returned, and present environmental conditions were established (Campbell *et al.* 2001).

Approximately 80 percent of Fort Polk and Peason Ridge is wooded, and about 95 percent of the two areas is covered by some sort of vegetation. Known flora of Fort Polk and/or Vernon Parish consists of 1,467 species and subspecific taxa in 561 genera and 151 families. Twenty-five species of special status flora, *i.e.* federal- and state-listed rare, threatened, and endangered species as well as candidate species, have been identified on Fort Polk (ENRMD and Gene Stout and Associates 2003c).

Figure 6: Vegetation, Fort Polk

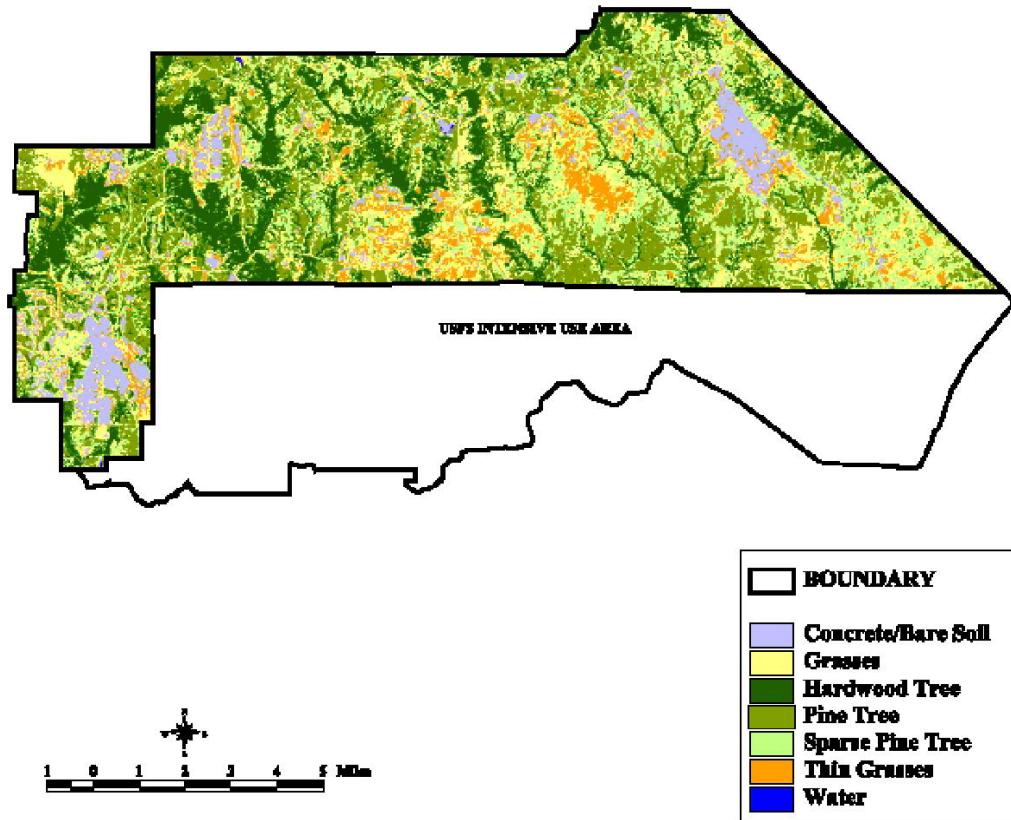
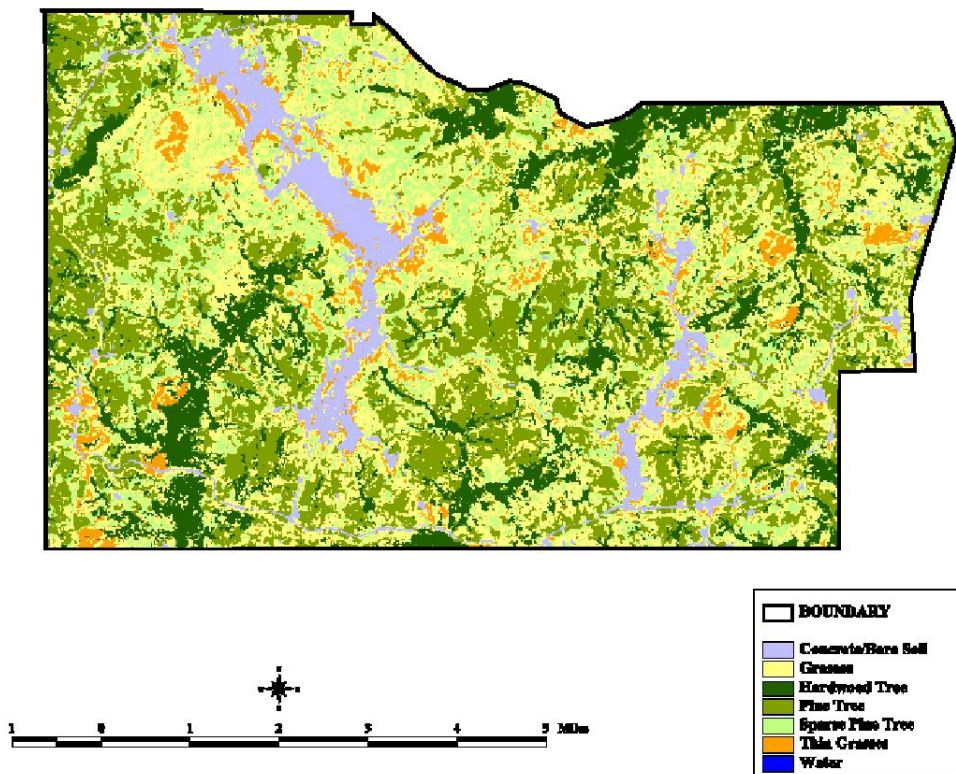


Figure 7: Vegetation, Peason Ridge



Thirteen major vegetation types have been identified on Fort Polk and Peason Ridge: (1) sandy woodland, (2) longleaf pine, (3) mixed pine-hardwood, (4) savannah, (5) bog, (6) baygall, (7) sand riparian, (8) clay riparian, (9) calcareous prairie, (10) Fleming calcareous forest, (11) sandstone glade, (12) swamp, and (13) open water. The vegetation developed in disturbed areas constitutes an additional vegetation type. A description of each of these vegetation types is provided in the Fort Polk *Integrated Natural Resources Management Plan* (ENRMD and Gene Stout and Associates 2003c).

Wetlands

Wetland areas on Fort Polk include pitcher plant bogs, 100 acres of man-made impoundments, 50 acres of beaver ponds, and 8,800 acres of riparian areas. Pitcher plant bogs are created by seepage from localized perched water tables. These bogs tend to be small and isolated and usually occur on ridge slopes (U.S. Army Corps of Engineers 1995). State rare plant species are also a common feature of these bogs. Together, wetlands make up about 6.5 percent of Fort Polk and are typically widely scattered (U.S. Army Corps of Engineers 1995).

Fauna

Fort Polk's wildlife species include most animals indigenous to the southwestern Louisiana pinelands region. Totals of 223 species of birds, 41 species of reptiles and amphibians, 31 species of mammals, 35 species of fish, 12 species of freshwater mussels, and 75 species of flying insects are recorded for Fort Polk (ENRMD and Gene Stout and Associates 2003c).

The Red-Cockaded Woodpecker is the only federally-listed threatened or endangered species occurring on Fort Polk. The preferred habitat of the woodpecker is mature longleaf pine forest with little hardwood midstory or understory. Threatened and endangered species are protected under the Endangered Species Act, and JRTC and Fort Polk has an endangered species management program for conservation of the Red-Cockaded Woodpecker. The *Endangered Species Management Plan for the Red-cockaded Woodpecker (*Picoides borealis*)* (ENRMD and Gene Stout and Associates 2003b) was approved by JRTC and Fort Polk in 2003.

3.5.2 Environmental Consequences

Proposed Action

Protection of sensitive archeological sites on Fort Polk, as described in Section 4.4.3, *Preservation/Mitigation Plans*, of the ICRMP, could have localized, beneficial effects to natural resources, since restricting digging and/or vehicular maneuver would reduce impacts to vegetation and soils. These effects, however, would be limited. Other management programs, including curation (ICRMP Section 4.4.3.4, *Curation Plan*) and management of historic architectural properties (ICRMP Section 4.4.3, *Preservation/Mitigation Plans*), would have little or no potential to affect natural resources. Overall implementation of the ICRMP would have no significant impact on biological resources.

No Action Alternative

Current procedures for protection of sensitive archeological sites on Fort Polk could have localized, beneficial effects to natural resources, since restricting digging and/or vehicular maneuver would reduce impacts to vegetation and soils. These effects, however, would be limited. Other management programs, including curation and management of historic architectural properties, would have little or no potential to affect natural resources. Overall, the No Action alternative would have no significant impact on biological resources.

3.5.3 Cumulative Effects

There would be no foreseeable cumulative effects to biological resources, either beneficial or negative, as a result of the proposed action or the No Action alternative. No effects would be produced by either the proposed action or the No Action alternative that could cumulatively be added to past, present, and foreseeable future actions.

3.6 Cultural Resources

3.6.1 Existing Conditions

The inventory of cultural resources on Fort Polk is described in greater detail in Chapter 3, *Cultural Resources Inventory*, of the ICRMP.

Archeological Sites

All accessible portions of Fort Polk, approximately 123,011 acres (96,290 acres on Main Post and 26,721 acres on Peason Ridge) have been surveyed for archeological sites. Survey is not required on the remaining acreage, approximately 16,154 acres, due to safety considerations, *e.g.*, impact areas, or extensive ground disturbance, *e.g.*, cantonment and recreation areas. In addition, all accessible portions of the U.S. Forest Service Limited Use Area (45,892 acres) have been surveyed for archeological sites. Areas not surveyed consist of U.S. Forest Service designated off-limits areas, timber company leases, and private in-holdings.

The current archeological inventory is as follows.

- A total of 3,042 archeological sites (excluding isolated finds) have been recorded.
- Site testing, *i.e.* Phase II investigation, has occurred on 559 sites, with 123 sites being determined eligible for inclusion on the NRHP.
- Phase II investigation is required for another 126 potentially eligible sites to determine NRHP eligibility.

Historic Architectural Properties

No buildings or standing structures on Fort Polk have been determined eligible for listing on the NRHP. The 317 buildings on Fort Polk constructed during World War II are covered under a Programmatic Memorandum of Agreement that allows for disposal of World War II-era mobilization construction on military installations. A total of 1,833 buildings on Fort Polk were constructed during the Cold War, *i.e.*, 1946-1989. Within the five-year planning period of the ICRMP (2004-2008), 87 of these buildings will reach 50 years of age.

World War II-Era Murals

Fort Polk is preserving two murals painted during World War II. The *Sports Mural*, formerly located in Building #1411, was likely painted by an American soldier during 1943. The *Louisiana Mosaic Mural*, recovered from the old Service Club, was likely painted by a German prisoner-of-war.

Curated Collections

Cultural resources curated by JRTC and Fort Polk consist of artifacts and associated documentation resulting from archeological investigations on Fort Polk. Currently, 457 cubic feet of artifacts and 346 cubic feet of associated documentation are curated at the Curation Facility.

Paleontological Resources

Although not strictly classified as cultural resources, paleontological sites and collections are managed by the JRTC and Fort Polk cultural resources staff due to similarities between managing paleontological and archeological resources. Fort Polk contains the most significant Miocene paleo-faunal deposits recorded in Louisiana. Since 1994, two major paleontological site clusters on Fort Polk have been intensively investigated by the Louisiana State University Museum of Natural Science. Major reports from this research include Schiebout (1995, 1997) and Schiebout and Ting (2000).

To date, 3,950 fossilized faunal specimens have been recovered from Fort Polk. These range from tiny shrew teeth to pieces of relatively large bones of the extinct rhinoceros and giant camel. Approximately 5,000 kilograms of rock have been processed. Fossils and related documentation (field notebooks, topographic maps, laboratory notes, acid lab notes, computer files, and digital photographs) are curated by the Louisiana State University Museum of Natural Science.

Traditional Cultural Properties/Sacred Sites

No traditional cultural properties or sacred sites have been identified through consultation with Native American tribes.

3.6.2 Environmental Consequences

Proposed Action

The ICRMP establishes a program for identification, evaluation, and treatment of cultural resources on Fort Polk. The ICRMP outlines the following cultural resources management projects and initiatives during 2004-2008:

- conduct internal review of JRTC and Fort Polk projects and activities for cultural resources concerns (Section 5.1, 2004-2008);
- conduct review per Section 106 of the NHPA in cooperation with the Louisiana SHPO, the Advisory Council, the U.S. Forest Service, and Native American Indian tribes, as appropriate (Section 5.2, 2004-2008);
- consult with Native American Indian tribes in accordance with Section 106 of the NHPA, the American Indian Religious Freedom Act, and the Native American Graves Protection and Repatriation Act (NAGPRA) (Section 4.1.4.1, 2004-2008);
- annually plan and implement Native American/Indian Heritage Month activities on Fort Polk (Section 4.1.4.1, 2004-2008);
- conduct annual consultation meeting in accordance with the 2000 NAGPRA Comprehensive Agreement with the Caddo Nation (Section 4.1.4.1, 2004-2008);
- conduct site testing to evaluate the National Register eligibility of 126 sites (Section 4.2.1.3, 2005-2007);
- conduct a comprehensive evaluation of all National Register-eligible archeological sites on Fort Polk and the U.S. Forest Service Limited Use Area (Section 4.2.1.3, 2008);
- evaluate for National Register eligibility a potential archeological district associated with Fullerton Mill and Town (Section 4.2.1.3, 2006);
- develop a Cold War historic context for Fort Polk covering the period 1946-1989 (Section 4.2.2.1, 2005);
- inventory 102 Cold War-era architectural properties constructed on Fort Polk during 1946-1973 (Section 4.2.2.1, 2005);
- install and maintain signage to protect significant archeological sites on Fort Polk (Section 4.4.3.1, 2004-2008);
- conduct periodic monitoring of significant archeological sites to assess the condition of signage and to identify impacts (Section 4.4.3.1, 2004-2008);
- in consultation with the Louisiana SHPO and the Caddo Nation, as appropriate, mitigate effects to significant archeological sites through data recovery (Section 4.4.3.1, 2004-2008);
- periodically monitor paleontological sites on Fort Polk for exposure of new conglomerates (Section 4.4.3.3, 2004-2008);
- curate artifacts and associated records in accordance with 36 CFR 79 and the *Louisiana Division of Archaeology, Standards and Guidelines for Curation of Archaeological Collections* (Section 4.4.3.4, 2004-2008);
- develop and implement standard operating procedures (SOPs) for curation (Section 4.4.3.4, 2004-2008);
- maintain a geographic information system (GIS) at the Environmental and Natural Resources Management Division (ENRMD) to support cultural resources management and the integration of cultural resources management with other management activities (Section 4.5.1, 2004-2008);
- develop and maintain databases at the Curation Facility to support cultural resources management (Section 4.5.2, 2004-2008);
- develop and distribute popular volumes covering the history and prehistory of the Fort Polk region (Section 4.6.1, 2004-2008);
- support initiatives and functions, including the Environmental Compliance Training Center, the Environmental Learning Center, Louisiana Archeology Week, and other special events, to educate military personnel and the public on the manner and need for cultural resources protection on Fort Polk (Sections 4.6.2, 4.6.3, 4.6.4, and 4.6.5, 2004-2008);
- implement measures to control the dissemination of sensitive cultural resources information (Section 4.7, 2004-2008);

- implement SOPs stipulated by the 2000 NAGPRA Comprehensive Agreement (Section 5.4, 5.5, and 5.6, 2004-2008);
- coordinate with the U.S. Forest Service regarding cultural resources management on U.S. Forest Service Intensive Use Area and Limited Use Area lands (Section 5.7, 2004-2008);
- conduct cultural resources law enforcement to enforce the Archeological Resources Protection Act of 1979 (ARPA) (Section 5.8, 2004-2008);
- conduct annual reviews of the ICRMP (Section 4.9, 2004-2008); and
- implement a full-scale update of the ICRMP in 2008 (Section 4.9, 2008).

Implementation of the ICRMP would benefit cultural resources on Fort Polk by integrating these projects with the Fort Polk military mission and the ENRMD budgeting process. The proposed action would proactively meet and prioritize cultural resources management requirements over the next five years. Overall, the proposed action would have a beneficial effect on cultural resources.

No Action Alternative

The No Action alternative would continue existing management practices as established in the 1999 Historic Preservation Plan. Over the next five years, most projects listed in the proposed action likely would be conducted. However, as the 1999 Historic Preservation Plan does not address the current five-year planning period, cultural resources management efforts would not be integrated on a programmatic level. The No Action alternative would still provide for compliance with cultural resources laws, but failure to develop and implement an ICRMP would result in noncompliance with Army policy. Overall, the No Action alternative would have no significant effect on cultural resources.

3.6.3 Cumulative Effects

There would be no foreseeable cumulative effects to cultural resources as a result of the proposed action. Prolonged non-compliance with Army policy and failure to prepare and implement an ICRMP could result in indirect, negative effects to cultural resources if there is turnover in JRTC and Fort Polk cultural resources personnel, particularly the Cultural Resources Manager, without a current cultural resources planning document in place. Therefore, the No Action alternative could result in slightly negative cumulative effects to cultural resources. There would be no additive cumulative effect to cultural resources from present or future proposed actions on Peason Ridge and Fort Polk. This is due to the installation's commitment to continue to manage cultural resources as defined in Section 3.6.2.

3.7 Environmental Justice

3.7.1 Existing Conditions

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* [59 Federal Regulation No. 32], issued in February 1994, provides that “each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” In accordance with the EO, environmental justice analyses are performed to identify potential disproportionately high and adverse impacts to these target populations from proposed federal actions and to identify alternatives that might mitigate these impacts.

The ICRMP addresses JRTC and Fort Polk compliance with the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA); the American Indian Religious Freedom Act of 1978, as amended; and provisions of the National Historic Preservation Act of 1966, as amended, that involve consultation with Native American tribes. These laws deal with Native American burials, funerary items, sacred sites, traditional cultural properties, or other culturally significant resources. Management of such resources, therefore, could have a disproportionate effect on Native American tribes. Twelve federally-recognized Native American tribes have been identified by JRTC and Fort Polk as consultation partners by virtue of direct or indirect cultural affiliation with the Fort Polk region (see ICRMP Section 4.1.4.2, *Points of Contact*).

3.7.2 Environmental Consequences

Proposed Action

As discussed in Section 4.1.4.1, *Native American Consultation Status and Initiatives*, of the ICRMP, JRTC and Fort Polk has entered into a Comprehensive Agreement with the Caddo Nation to direct future compliance with NAGPRA. SOPs established by this agreement appear as Sections 5.4, *SOP: Inadvertent Discovery of Native American Remains and Associated Funerary Objects, Sacred Objects, or Objects of Cultural Patrimony* (NAGPRA SOP#1), 5.5, *SOP: Intentional Archeological Excavation That May Result in Discovery of Native American Human Remains, Funerary Objects, Sacred Objects, and Objects of Cultural Patrimony* (NAGPRA SOP #2), and 5.6, *SOP: Treatment and Disposition of Native American Human Remains, Funerary Objects, Sacred Objects, and Objects of Cultural Patrimony Discovered Inadvertently or During Planned Archeological Excavations* (NAGPRA #3), of the ICRMP. JRTC and Fort Polk consultation with Native American tribes is ongoing. The ICRMP establishes a project to host an annual consultation meeting with tribal leaders in conjunction with Native American/Indian Heritage Month. Overall, the proposed action would have no significant effect on environmental justice for Native Americans.

No Action Alternative

JRTC and Fort Polk has entered into a Comprehensive Agreement with the Caddo Nation to direct future compliance with NAGPRA. This agreement would be implemented regardless of whether or not the ICRMP is implemented. JRTC and Fort Polk consultation with Native American tribes would continue, and JRTC and Fort Polk would continue to host an annual consultation meeting with tribal leaders in conjunction with Native American/Indian Heritage Month. Overall, the No Action alternative would have no significant effect on environmental justice for Native Americans.

3.7.3 Cumulative Effects

There would be no foreseeable cumulative effects to environmental justice as a result of the proposed action. The No Action alternative could have indirect, negative effects to environmental justice if there is turnover in JRTC and Fort Polk cultural resources personnel and Native American consultation procedures are not established in a planning document. JRTC and Fort Polk relationships established with Native American tribes could be set back. Therefore, the No Action alternative could result in slightly negative cumulative effects to environmental justice.

4.0 SUMMARY OF EFFECTS AND CONCLUSIONS

As discussed in Section 1.4.2, *Issues Not Analyzed or Considered to be Potentially Significant*, of this EA, some resource areas have been excluded from analysis due to lack of potential for effects resulting from the proposed action and the No Action alternative. Results of the analysis for resource areas potentially affected by the proposed action or the No Action alternative are summarized in the following table.

Table 3: Summary of Environmental Effects

RESOURCE	NO ACTION ALTERNATIVE	PROPOSED ACTION
Land Use	No significant impact - cultural resources reviews of land use actions would continue. There could be slightly negative, cumulative impacts if there is turnover of personnel.	No significant impact - cultural resources reviews of land use actions would continue.
Facilities (Real Property)	No significant impact - could lead to delays in MCA projects and other facilities management activities, but, overall, these slightly negative effects would be insignificant in the long term.	No significant impact - Slightly beneficial effects would result from streamlining cultural resources review of MCA projects and other facilities management activities. Overall, however, these effects would be insignificant.
Soils	No significant impact - potential effects to soils from cultural resources investigations would be negligible.	No significant impact - potential effects to soils from cultural resources investigations would be negligible.
Ground and Surface Water	No significant impact - potential effects to ground and surface water from cultural resources management would be negligible.	No significant impact - potential effects to ground and surface water from cultural resources management would be negligible.
Biological Resources	No significant impact - potential effects to biological resources from archeological site protection would be negligible.	No significant impact - potential effects to biological resources from archeological site protection would be negligible.
Cultural Resources	No significant impact – would result in no change in cultural resources management. There could be slightly negative, cumulative impacts if there is turnover of personnel.	Beneficial – would integrate cultural resources management with military mission over the next five years.
Environmental Justice	No significant impact – consultation with Native American tribes would continue. There could be slightly negative, cumulative impacts if there is turnover of personnel.	No significant impact – consultation with Native American tribes would continue.

Based upon the analyses contained in this EA, it has been determined that known and potential impacts of the proposed action on the physical, natural, and cultural environment would be either negligible or of a positive nature. The proposed action would have beneficial impacts to cultural resources. Implementation of the JRTC and Fort Polk ICRMP would result in efficient management of cultural resources at Fort Polk. The ICRMP establishes explicit responsibilities, SOPs, and long-range goals for managing cultural resources at Fort Polk and the U.S. Forest Service Limited Use Area in compliance with all applicable federal laws, regulations, executive orders, Presidential memoranda, and Army guidance.

Environmental impacts of the proposed action and the No Action alternative are similar in that there would be no significant impacts to land use, facilities, soils, ground and surface water, and biological resources. The slightly negative impacts to land use, facilities, and environmental justice associated with the No Action alternative would not result in significant effects. Likewise, the slightly negative effects of the No Action alternative on cultural resources would not be significant. The proposed action would result in beneficial effects to cultural resources; therefore, the preferred alternative is to implement the ICRMP.

Preparation of an Environmental Impact Statement (EIS) is not required, and a FNSI will be published in accordance with 32 CFR Part 651, *Environmental Analysis of Army Actions; Final Rule*.

5.0 INTERDISCIPLINARY TEAM

Scott Faris – Cultural Resources Technician, ENRMD, Fort Polk, LA

Wayne Farris – NEPA Coordinator, ENRMD, Fort Polk, LA

Jim Grafton - Cultural Resources Manager, ENRMD, Fort Polk, LA

Robert Hays - Archeological Technician, ENRMD, Fort Polk, LA

Ellen Ibert - Curation Specialist, ENRMD, Fort Polk, LA

Dr. Charles Stagg - Chief, ENRMD, Fort Polk, LA

Stephanie Stephens - Chief, Conservation Branch, ENRMD, Fort Polk, LA

Cecil Tebbs – Attorney Advisory, Staff Judge Advocate, Fort Polk, LA

Millie Tew - GIS Specialist, ENRMD, Fort Polk, LA

6.0 LIST OF AGENCIES AND PERSONS CONTACTED

Dr. James E. Cobb - Archeologist, Southeast Regional Office, Installation Management Agency, Fort McPherson, GA

Thelma “Pat” McCoy – Environmental Protection Specialist, Southwest Regional Office, Installation Management Agency, Fort Sam Houston, TX

Duke Rivet – Louisiana State Historic Preservation Office, Division of Archeology, Baton Rouge, LA

7.0 LIST OF PREPARERS

Jeffrey W. Blythe - Cultural Resources Planner and principle author of the draft JRTC and Fort Polk Integrated Cultural Resource Management Plan - Dr. Blythe has a Bachelor of Arts in Anthropology, a Master of Philosophy in Social Anthropology, and a Ph.D. in Social Anthropology. Mr. Blythe has worked within or for Department of Defense natural and cultural resources programs for 11 years.

Gene Stout - Owner and principle author of INRMP - Mr. Stout has Bachelor of Science and Master of Science degrees in Zoology with an emphasis on wildlife biology. Mr. Stout has 25 years of experience with Department of Defense environmental programs and was responsible for natural resources management and National Environmental Policy Act compliance at Fort Sill, Oklahoma for 18 years.

Jeffrey S. Trousil - Natural Resources Planner - Mr. Trousil has a Bachelor of Sciences in Wildlife. Mr. Trousil worked in the natural resources area within or for various federal agencies (primarily the Department of Army) since 1985 before moving to Gene Stout and Associates in 1997.

8.0 REFERENCES

- Anderson, David G., and Steven D. Smith. 1999. *JRTC and Fort Polk Historic Preservation Plan: Cultural Resources Action Plan/Planning Manual*. Southeast Archeological Center, National Park Service, Tallahassee, FL.
- Campbell, L. Janice, James R. Morehead, James H. Matthews, Philip D. Bourgeois, Jr, and Prentice M. Thomas, Jr. 2001. *Fort Polk-49: The Results of a Forty-Ninth Program of Site Testing at Ten Sites, Fort Polk Military Reservation, Vernon Parish, Louisiana*. Submitted by Prentice Thomas and Associates, Inc. to the National Park Service, Southeast Region, Atlanta, GA.
- Environmental and Natural Resources Management Division and Gene Stout and Associates. 2003a. *Environmental Assessment for Endangered Species Management Plan, Fort Polk, Louisiana*. Environmental and Natural Resources Management Division, Fort Polk, LA.
- _____. 2003b. *Endangered Species Management Plan for the Red-cockaded Woodpecker (Picoides borealis)*. Environmental and Natural Resources Management Division, Fort Polk, LA.
- _____. 2003c. *Integrated Natural Resources Management Plan and Environmental Assessment, Joint Readiness Training Center and Fort Polk, Louisiana*. Environmental and Natural Resources Management Division, Fort Polk, LA.
- Freese and Nichols, Inc. 2001. *Annual Review of Socioeconomic, Military Training, Natural Resources, Conservation, and Environmental Compliance Data for the Joint Readiness Training Center and Fort Polk*. The Environmental Sourcebook, Volume 4, prepared for the Environmental and Natural Resources Management Division, Directorate of Public Works, Fort Polk, LA.
- McWreath H.C. III, and C.W. Smoot. 1989. *Geohydrology and Development of Ground Water at Fort Polk, Louisiana*. Water Resources Investigation Report 88-4088, U.S. Geological Survey, Baton Rouge, LA.
- Tetra Tech, Incorporated. 2003a. *Environmental Assessment for Construction and Operation of the Digital Multi-Purpose Battle Area Course (DMPBAC)*. Prepared for Joint Readiness Training Center and Fort Polk, LA.
- _____. 2003b. *Draft Environmental Impact Statement for 2nd Armored Cavalry Regiment Transformation and Installation Mission Support, Joint Readiness Training Center (JRTC) and Fort Polk, Louisiana and Long-Term Military Training Use of Kisatchie National Forest Lands*. Prepared for Joint Readiness Training Center and Fort Polk, LA.
- Schiebout, Judith A. 1995. *Paleofaunal Survey, Collecting, Processing, and Documentation at Two Locations on Fort Polk, Louisiana*. Fort Worth District, U.S. Army Corps of Engineers, Fort Worth, TX.
- _____. 1997. *Paleofaunal Survey, Collecting, Processing, and Documentation at Two Locations on Fort Polk, Louisiana*. Revision of Schiebout 1995. Fort Worth District, U.S. Army Corps of Engineers, Fort Worth, TX.
- Schiebout, Judith A., and Suyin Ting. 2000. *Paleofaunal Survey, Collecting, Processing, and Documentation at Locations in the Castor Creek Member, Miocene Fleming Formation, Fort Polk, Louisiana*. Fort Worth District, U.S. Army Corps of Engineers, Fort Worth, TX.
- U.S. Army Corps of Engineers. 1992. *Realignment of the Joint Readiness Training Center and the 199th Separate Motorized Brigade to Fort Polk, Louisiana*. Environmental Assessment prepared for Memphis District, Memphis, TN.
- _____. 1995. *Fort Polk Real Property Master Plan*. Draft plan produced by the Fort Worth District, U.S. Army Corps of Engineers, Fort Worth, TX.

9.0 PUBLIC COMMENTS